



TECHNICAL MEMORANDUM

Date: August 21, 2013

To: Will Ernst

From: Scott Matthees

cc: Kent Angelos & Ted Norton (Golder)

Project No.: 0131646013.500.01

Company: Boeing

Email:

RE: BUILDING 2-88 MAZAK FOUNDATION COMPLETION

1.0 INTRODUCTION

The Boeing Company (Boeing) installed a foundation and a utility trench for a new Mazak machine in the southeast portion of Building 2-88 at Plant 2 (Figure 1) in late July and early August, 2013. The work included sawcutting and removing the existing concrete slab, excavating subgrade materials, excavating a utility trench, placing base gravel, and pouring concrete for the new foundation and utility trench.

The foundation is located in the Plant 2 Industrial Risk Management Area (IRMA), and within a Resource Conservation and Recovery Act (RCRA) unit, Solid Waste Management Unit (SWMU) 2-89.68, Reclamation Yard (Figure 2). The reclamation yard was used from 1942 to 1996. The yard consisted of approximately eight acres of pavement located in the southeastern corner of the South Yard Area. The reclamation yard stored recyclable materials, which included aluminum, brass, steel, and copper shavings generated from cutting operations. The reclamation yard also recycled a variety of products including film, bulk metal, empty drums, and paint. Coolant and oils were often associated with the scrap metal. The area including the new Mazak foundation was remediated and redeveloped in the late 1990s including construction of the 2-88 building.

2.0 EXCAVATION

An excavation was completed to install the new Mazak foundation and utilities. The foundation for Mazak machine measured approximately 10 feet long by 8.5 feet wide by 2 feet thick. The excavation extended to a depth of approximately 2.5 to 3 feet below ground surface (bgs), and resulted in the removal of a total of approximately 10 cubic yards of concrete, base gravel, fill, and subgrade soil. The excavated materials were properly managed for waste characterization and disposal. Groundwater was not encountered in the excavations, as the groundwater surface at Plant 2 is typically 10 to 12 feet bgs.

3.0 SOIL ANALYTICAL DATA

A preconstruction review of historical soil analytical data indicated that two borings were located within a 25-foot radius of the work area (Figure 2). Two soil samples were collected in boring SB-08933 at depths of 3 to 5 feet bgs and 8 to 10 feet bgs, and two soil samples were collected in boring SB-08934 at depths of 3 to 5 feet bgs and 8 to 10 feet bgs. All of the samples were analyzed for volatile organic compounds (VOCs), metals, polychlorinated biphenyls (PCBs) and total petroleum hydrocarbons (TPH). The

analytical results for the soil samples indicated that no constituent of concern (COC) concentrations exceeded the Target Media Cleanup Levels (TMCLs) or the draft Final Media Cleanup Levels (FMCLs) for the IRMA. The analytical results for the soil sampling were presented in Table 1 of the Technical Memorandum (tech memo), *Building 2-88 Mazak Foundation*, dated June 27, 2013.

No groundwater samples were collected in the historical borings.

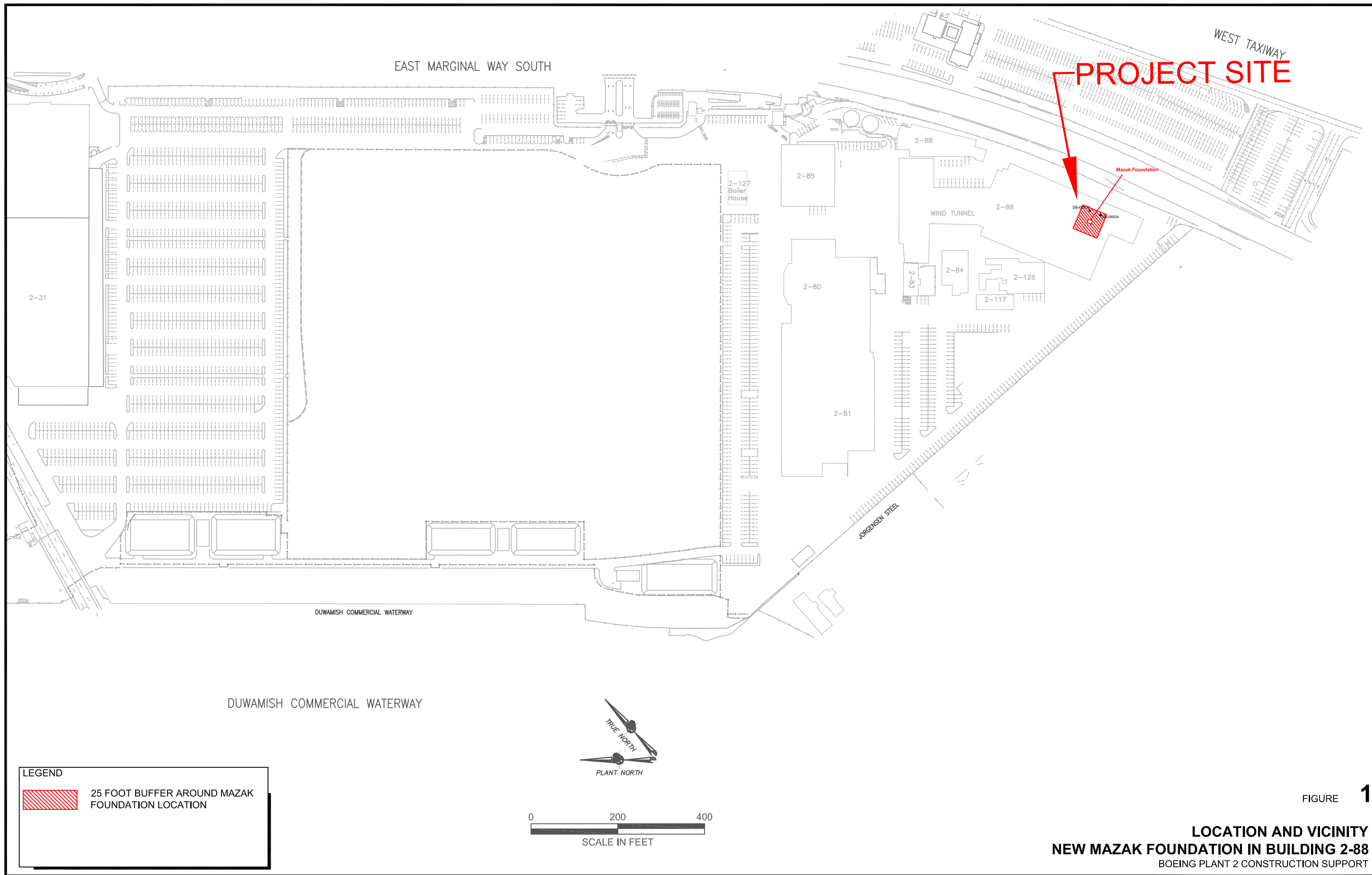
4.0 CONSTRUCTION AND SUPPORT ACTIVITIES

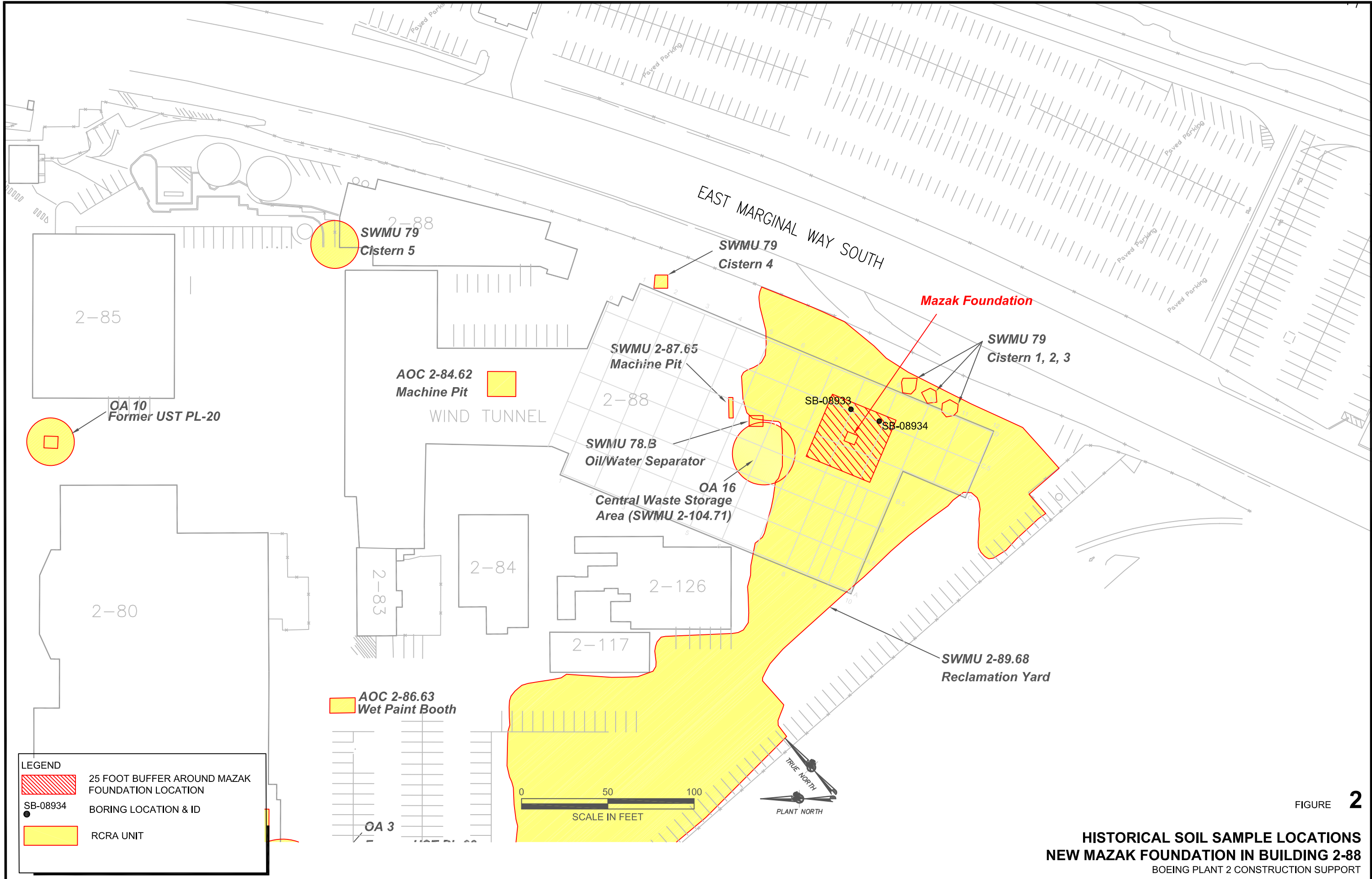
Construction support activities were conducted in accordance with Golder Associates Incorporated's (GAI's) current version (013164611a) of the Plant 2 General Construction Health and Safety Plan, and in accordance with Boeing's environmental, health and safety requirements. The support activities included visual monitoring of the concrete slab and soil as they were removed. The work area and excavated materials were also monitored for VOCs using a photoionization detector (PID). No impacted pavements or soils were observed or detected by the field monitoring. No construction sampling of soil or groundwater was necessary based on the analytical data and field monitoring. The excavated materials were segregated as they were removed and properly managed for waste characterization and disposal.

Attachments or Enclosures:

LIST OF FIGURES

- Figure 1 – Location and Vicinity
New Mazak Foundation in Building 2-88
- Figure 2 – Historical Soil Sample Locations
New Mazak Foundation in Building 2-88





LEGEND

- 25 FOOT BUFFER AROUND MAZAK FOUNDATION LOCATION
- SB-08934 BORING LOCATION & ID
- RCRA UNIT

FIGURE **2**

**HISTORICAL SOIL SAMPLE LOCATIONS
NEW MAZAK FOUNDATION IN BUILDING 2-88**
BOEING PLANT 2 CONSTRUCTION SUPPORT